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Packers and
Stockyards
Administration

Federal Grain
Inspection
Service

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United States Standards for Whole Dry Peas, Split Peas, and Lentils

**U.S. Department of Agriculture
Grain Inspection, Packers and Stockyards Administration
Federal Grain Inspection Service
STOP 3649
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These standards are available on the Internet at:
<http://www.usda.gov/gipsa/strulreg/standard/stds.htm>

or,

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UNITED STATES STANDARDS FOR WHOLE DRY PEAS¹

Terms Defined

401 Definition of whole dry peas.

Threshed seeds of the pea plant (*Pisum sativum* L.) and the winter field pea plant (*Pisum sativum* var. *arvense* (L.) Poir.) which after the removal of dockage contain 50 percent or more of whole peas and not more than 10.0 percent of foreign material.

402 Definitions of other terms.

For the purposes of these standards, the following terms shall have the meanings stated below:

(a) *Bleached peas*. Whole and pieces of dry peas of green-colored varieties which are bleached distinctly yellow in color or peas of yellow-colored varieties which are bleached distinctly green in color.

(b) *Classes*. The following six classes:

(1) *Smooth Green Dry Peas*. Dry peas of the garden type which have smooth seedcoats and green cotyledons and contain not more than 1.5 percent of other classes.

(2) *Smooth Yellow Dry Peas*. Dry peas of the garden type which have smooth seedcoats and yellow cotyledons and contain not more than 1.5 percent of other classes.

(3) *Wrinkled Dry Peas*. Dry peas of the garden type which have wrinkled seedcoats and contain not more than 1.5 percent of other classes.

(4) *Winter Dry Peas*. Dry peas of the winter field pea type which contain not more than 1.5 percent of other classes.

(5) *Miscellaneous Dry Peas*. Dry peas that do not meet the criteria for any other class of dry peas and contain not more than 1.5 percent of other classes. (The grade limits for the factor Bleached peas shall not apply to Miscellaneous Dry peas, except for Marrowfat-type dry peas.)

¹ Compliance with the provisions of these standards does not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act, or other Federal laws.

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(6) *Mixed Dry Peas.* Any mixture that does not meet the requirements for the classes Smooth Green, Smooth Yellow, Wrinkled, Winter, or Miscellaneous Dry peas; or any mixture of different types of Miscellaneous Dry peas.

(c) *Damaged peas.* Whole and pieces of dry peas which are distinctly:

(1) Damaged by frost, weather, disease, heat (other than materially discolored as a result of heating), or other causes; and

(2) Soiled or stained by dirt (not applicable for the class Wrinkled Dry Peas).

Damaged peas shall not include weevil-damaged peas or heat-damaged peas.

(d) *Defective peas.* The categories of defective peas shall be weevil-damaged peas, heat-damaged peas, damaged peas, other classes, bleached peas, split peas, shriveled peas, and peas with cracked seedcoats.

(e) *Distinctly low quality.* Whole dry peas which are obviously of inferior quality because they are stained by an unknown foreign substance; or because they otherwise contain a known toxic substance(s) or an unknown foreign substance(s); or because they are in an unusual state or condition, and which cannot be graded by use of the other grading factors provided in the standards.

(f) *Dockage.* Small, underdeveloped dry peas, pieces of dry peas, and all matter other than dry peas which can be removed readily by the use of an approved device in accordance with procedures prescribed in the Pea and Lentil Handbook and the Equipment Handbook.² For the purpose of this paragraph, Aapproved device@shall include sieves as set forth in paragraph (q) of this section and any other equipment that is approved by the Administrator as giving equivalent results.³

(g) *Dockage-free dry peas.* Dry peas from which the dockage has been removed.

(h) *Foreign material in dockage-free dry peas.* All matter other than dry peas and including detached seedcoats.

² Publications referenced in these standards will be made available upon request to the Grain Inspection, Packers and Stockyards Administration, U.S. Department of Agriculture, 1400 Independence Avenue, S.W., Washington, DC 20250.

³ Requests for information concerning approved devices and procedures, criteria for approved devices, and requests for approval of devices should be directed to the Grain Inspection, Packers and Stockyards Administration, U.S. Department of Agriculture, 1400 Independence Ave., S.W., Washington, DC 20250.

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- (i) *Foreign material in thresher-run dry peas.* All matter other than dry peas, including detached seedcoats, which cannot be readily removed in the determination of dockage.
- (j) *Good color peas.* Dry peas that in mass are practically free from discoloration and have the natural color and appearance characteristics of the predominating class.
- (k) *Heat-damaged peas.* Whole and pieces of dry peas which have been materially discolored as a result of heating.
- (l) *Moisture.* Water content in whole peas as determined by an approved device in accordance with procedures prescribed in the Pea and Lentil Handbook and the Equipment Handbook. For the purpose of this paragraph Approved device@ shall include the Motomco moisture meter and any other equipment that is approved by the Administrator as giving equivalent results.
- (m) *Other classes.* Whole and pieces of dry peas which are of a contrasting color or which differ materially in shape, or other characteristics from the predominating class; and in the case of Miscellaneous Dry peas, which differ from the predominating type.
- (n) *Peas with cracked seedcoats.* Dry peas having readily discernible cracked seedcoats or peas which have all or a part of the seedcoat removed, and broken peas which are more than one-half of a whole pea.
- (o) *Poor color peas.* Dry peas that in mass are distinctly off-color from the characteristic color of the predominating class as a result of age or any other cause.
- (p) *Shriveled peas.* Dry peas which are distinctly shriveled in contrast to the natural shape and appearance of normally developed peas.
- (q) *Sieves.*
- (1) *9/64 x 3/4 oblong-hole sieve.* A metal sieve 0.032 inch thick with oblong perforations 0.1406 inch by 0.750 (:) inch.
- (2) *10/64 x 3/4 slotted-hole sieve.* A metal sieve 0.032 inch thick with slotted perforations 0.1562 inch by 0.750 (:) inch.
- (3) *11/64 x 3/4 slotted-hole sieve.* A metal sieve 0.032 inch thick with slotted perforations 0.1718 inch by 0.750 (:) inch.
- (4) *12/64 x 3/4 slotted-hole sieve.* A metal sieve 0.032 inch thick with slotted perforations 0.1875 inch by 0.750 () inch.

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- (5) *13/64 x 3/4 slotted-hole sieve.* A metal sieve 0.032 inch thick with slotted perforations 0.2031 inch by 0.750 (:) inch.
- (6) *16/64 round-hole sieve.* A metal sieve 0.032 inch thick with round perforations 0.2500 inch in diameter.
- (r) *Split peas.* The halves or smaller pieces of dry peas and dry peas in which the halves are loosely held together.
- (s) *Thresher-run dry peas.* Dry peas from which the dockage has not been removed.
- (t) *Weevil-damaged peas.* Whole and pieces of dry peas which are distinctly damaged by the pea weevil or other insects.
- (u) *Whole peas.* Dry peas with one-fourth or less of the pea removed and with the cotyledons or parts of cotyledons firmly held together.

Principles Governing Application of Standards

403 Basis of determinations.

- (a) All factor determinations shall be made upon the basis of the dry peas after the removal of dockage with the following exceptions:
- (1) Dockage in thresher-run dry peas shall be determined upon the basis of the peas as sampled.
- (2) Color shall be determined after the removal of dockage, defective peas, and foreign material.
- (b) Defects in peas shall be scored in accordance with the order shown in 402(d) and once an individual pea is scored in a defective category; it shall not be scored for any other defect. Percentages for all categories of defects shall be calculated on the basis of the total weight of the sample analyzed for defective peas.

404 Temporary modifications in equipment and procedures.

The equipment and procedures referred to in the whole dry peas standards are applicable to peas produced and harvested under normal environmental conditions. Abnormal environmental conditions during the production and harvesting of peas may require minor temporary modifications in the equipment or procedures to obtain results expected under normal conditions. When these adjustments are necessary, Federal Grain Inspection Service field offices, official inspection agencies, and interested parties in the dry pea industry will be notified promptly in writing of the modification. These modifications shall not include changes in interpretations of identity, class, quality, or condition.

405 Percentages.

(a) *Rounding.* Percentages are determined on the basis of weight and are rounded as follows:

(1) When the figure to be rounded is followed by a figure greater than or equal to 5, round to the next higher figure; e.g., report 6.36 as 6.4, 0.35 as 0.4, and 2.45 as 2.5.

(2) When the figure to be rounded is followed by a figure less than 5, retain the figure; e.g., report 8.34 as 8.3, and 1.22 as 1.2.

(b) *Recording.* All percentages shall be stated in whole and tenth percent to the nearest tenth percent.

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Grades, Grade Requirements, and Grade Designations

406 Grades and grade requirements for dockage-free dry peas. (See also 408.)

Grading Factors	Maximum percent limits of: Grades U.S. Nos. <u>1</u> /		
	1	2	3
Weevil-Damaged Peas	0.3	0.8	1.5
Heat-Damaged Peas	0.2	0.5	1.0
Damaged Peas <u>2</u> /	1.0	1.5	2.0
Other Classes <u>3</u> /	0.3	0.8	1.5
Bleached Peas <u>4</u> /	1.5	3.0	5.0
Split Peas	0.5	1.0	1.5
Shriveled Peas	2.0	4.0	8.0
Peas with Cracked Seedcoats	5.0	7.0	9.0
Foreign Material	0.1	0.2	0.5
Minimum Requirements for Color	Good	Good	Poor
<p>U.S. Sample grade: U.S. Sample grade shall be dockage-free peas which:</p> <p>(a) Do not meet the requirements for the grades U.S. Nos. 1, 2, or 3; or</p> <p>(b) Contain metal fragments, broken glass, or a commercially objectionable odor; or</p> <p>(c) Contain more than 15 percent moisture; or</p> <p>(d) Are materially weathered, heating, or distinctly low quality; or</p> <p>(e) Are infested with live weevils or other live insects. <u>5</u>/</p> <p><u>1</u>/ Uniformity of Size Requirements - Dry peas of any of the numerical grades shall be of such size that not more than 3.0 percent shall pass through the appropriate oblong-hole sieve as follows:</p> <p>Winter Dry peas 9/64" x 3/4"</p> <p>Special grade ASmall@peas 10/64" x 3/4"</p> <p>All other peas 11/64" x 3/4"</p> <p><u>2</u>/ Damaged peas do not include weevil-damaged or heat-damaged peas.</p> <p><u>3</u>/ These limits do not apply to the class Mixed Dry peas.</p> <p><u>4</u>/ These limits do not apply to Winter Field peas and Wrinkled peas.</p> <p><u>5</u>/ As applied to dockage-free whole dry peas, the meaning of the term Ainfested@as set forth in the Pea and Lentil Handbook.</p>			

407 Grade designation for dockage-free dry peas.

(a) The grade designation for dockage-free dry peas shall include, in the order named (1) the letters AU.S.; (2) the number of the grade or the words ASample grade; (3) the name of each applicable special grade; and (4) the name of the class. The grade designation for the class Mixed Dry Peas shall also include, following the words AMixed Dry Peas, the name and approximate percentage of each class of dry peas in the mixture, in the order of predominance.

(b) At the request of the applicant for inspection, official inspection personnel may include on the grade certificate under ARemarks, a statement substantially as follows:
AVariety stated by the applicant to be: ____.

Special Grades, Special Grade Requirements, and Special Grade Designations

408 Special grades and requirements.

A special grade, when applicable, is supplemental to the grade assigned under 406. Such special grades are established and determined as follows:

(a) *Large.* Peas of the classes Smooth Green Dry Peas or Smooth Yellow Dry Peas of which not more than 3.0 percent of the peas will readily pass through the 16/64 round-hole sieve.

(b) *Small.* Peas of the classes Smooth Green Dry Peas or Smooth Yellow Dry Peas of which not more than 3.0 percent of the peas will remain on the 16/64 round-hole sieve and not more than 3.0 percent will readily pass through the 10/64 x 3/4 slotted-hole sieve.

409 Special grade designation.

The grade designation for large and small dry peas shall include, preceding the class, the word ALarge or ASmall, as warranted, and all other information prescribed in 407.

410 Thresher-run dry peas.

Thresher-run dry peas shall be inspected for factors only, without reference to grade.

(a) Thresher-run dry peas may be inspected for: Class; defective peas and foreign material; dockage; color description; and moisture.

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(b) The percentage of defective peas and foreign material shall be combined and shown on the certificate as **A**total defects and foreign material.@ For the classes of smooth seeded peas only, the percentage of peas with cracked seedcoats in excess of 3.0 percent shall be included in the factor **A**total defects and foreign material.@ (Example: In a sample containing 3.2 percent of peas with cracked seedcoats, only 0.2 percent would be included in the total defects and foreign material.)

(c) The percentage of total dockage, total defects and foreign material shall be computed on the basis of the sample as a whole and be shown on the certificate as **A**total dockage, defects and foreign material.@

UNITED STATES STANDARDS FOR SPLIT PEAS¹

Terms Defined

501 Definitions.

For the purposes of these standards the following terms shall have the meanings stated below:

- (a) *Bleached split peas.* Split peas of green-colored varieties which are bleached distinctly yellow in color or split peas of yellow-colored varieties which are bleached distinctly green in color.
- (b) *Classes.* The following three classes:
 - (1) *Green split peas.* Split peas from the garden varieties which have green-colored cotyledons.
 - (2) *Yellow split peas.* Split peas from the garden varieties which have yellow-colored cotyledons.
 - (3) *Winter split peas.* Split peas from the Austrian Winter or Romack varieties, or of other similar varieties.
- (c) *Contrasting split peas.* Split peas which are of a color contrasting with the predominating class of split peas. Bleached split peas of the predominating class shall not be considered as contrasting split peas.
- (d) *Damaged split peas.* Split peas which are distinctly damaged by frost, weather, disease, heat (other than to a material extent), or other causes (except weevil or material heat damage), or are distinctly soiled or stained by nightshade, dirt, or toxic material.
- (e) *Defective split peas.* The categories of defective split peas shall be weevil-damaged split peas, heat-damaged split peas, damaged split peas, contrasting split peas, whole peas, white caps, and bleached split peas.
- (f) *Fair color split peas.* Split peas that in mass are off color from the characteristic color of the predominating class as a result of age or any other cause.

¹ Compliance with the provisions of these standards does not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act, or other Federal laws.

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- (g) *Foreign material.* All matter which will pass readily through a 22/64 round-hole sieve and all matter other than split peas which remains on the sieve. (Foreign material shall include detached seedcoats and pieces of detached seedcoats.)
- (h) *Good color split peas.* Split peas that in mass are practically free from discoloration and have the natural color and appearance characteristic of the predominating class.
- (i) *Heat-damaged split peas.* Split peas which have been materially discolored and damaged by heat.
- (j) *Poor color split peas.* Split peas that in mass are distinctly off color from the characteristic color of the predominating class as a result of age or any other cause.
- (k) *Split peas.* Dry threshed seeds of the garden pea plant (*Pisum sativum L.*) and the winter field pea plant (*Pisum sativum var. arvense (L.) Poir.*) of which 50.0 percent or more have been split into halves or smaller pieces and which contain not more than 10.0 percent of foreign material.
- (l) *Weevil-damaged split peas.* Split peas which are distinctly damaged by the pea weevil or other insects.
- (m) *White caps.* Split peas with seedcoats attached.
- (n) *Whole peas.* Dry peas which are not split.
- (o) *22/64 round-hole sieve.* A 22/64 round-hole sieve shall be a metal sieve 0.0319 inch thick, perforated with round holes 0.0391 (22/64) inch in diameter, which are 0.075 inch from center to center. (The perforations of each row shall be staggered in relation to the adjacent rows.)
- (p) *6/64 round-hole sieve.* A 6/64 round-hole sieve shall be a metal sieve 0.0319 inch thick, perforated with round holes 0.0938 (6/64) inch in diameter which are 0.1562 (5/32) inch from center to center. (The perforations of each row shall be staggered in relation to the adjacent rows.)
- (q) *8/64 round-hole sieve.* An 8/64 round-hole sieve shall be a metal sieve 0.0319 inch thick, perforated with round holes 0.1250 (8/64) inch in diameter which are 0.1875 (3/16) inch from center to center. (The perforations of each row shall be staggered in relation to the adjacent rows.)
- (r) *10/64 round-hole sieve.* A 10/64 round-hole sieve shall be a metal sieve 0.0319 inch thick, perforated with round holes 0.1562 (10/64) inch in diameter which are 0.2187

(7/32) inch from center to center. (The perforations of each row shall be staggered in relation to the adjacent rows.)

(s) *12/64 round-hole sieve.* A 12/64 round-hole sieve shall be a metal sieve 0.0319 inch thick, perforated with round holes 0.1875 (12/64) inch in diameter which are 0.250 (3) inch from center to center. (The perforations of each row shall be staggered in relation to the adjacent rows.)

Principles Governing Application of Standards

502 Basis of determinations.

(a) All factor determinations shall be made on the basis of the split peas as sampled.

(b) Defects in split peas shall be scored in accordance with the order shown in 501(e) and once an individual pea is scored in a defective category, it shall not be scored for any other defect but it shall remain as a part of the sample for purposes of determining the percentages of other defects in the sample.

503 Moisture.

Moisture content shall be determined by the use of equipment and procedures set forth in the Equipment Handbook, or by any method which gives equivalent results (see 506).

504 Percentages.

All percentages shall be determined on the basis of weight and shall be rounded off in accordance with instructions shown in the Pea and Lentil Handbook (see 506).

Percentages shall be stated in whole and tenth percent to the nearest tenth percent.

505 Interpretive line samples.

Interpretive line samples showing the official scoring line for factors that are determined by visual observation shall be maintained by the Federal Grain Inspection Service, U.S. Department of Agriculture, and shall be available for reference in all inspection offices that inspect and grade split peas.

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506 References.

The following publications are referenced in these standards and copies will be made available upon request to the Federal Grain Inspection Service, U.S. Department of Agriculture.

(a) Equipment Handbook, U.S. Department of Agriculture, Federal Grain Inspection Service.

(b) Pea and Lentil Handbook, U.S. Department of Agriculture, Federal Grain Inspection Service.

Grades, Grade Requirements, and Grade Designations

507 Grades and grade requirements for split peas. (See also 509.)

Grading Factors	Maximum percent limits of: Grades U.S. Nos.		
	1	2	3
Split Peas Passing Through -			
10/64-inch Round-Hole Sieve	3.0	15.0	25.0
8/64-inch Round-Hole Sieve	0.5	3.0	5.0
6/64-inch Round-Hole Sieve	0.1	0.2	0.3
Weevil-Damaged Split Peas	0.5	1.0	1.5
Heat-Damaged Split Peas	0.2	0.5	1.0
Damaged Split Peas ^{1/}	1.0	1.5	2.0
Contrasting Split Peas			
In Green & Yellow Split Peas Only	0.3	0.8	1.5
In Winter Split Peas Only	0.5	1.0	2.0
Whole Peas	0.5	1.0	2.0
White Caps			
In Green & Yellow Split Peas Only	1.0	2.0	3.0
In Winter Split Peas Only	1.5	3.0	5.0
Bleached Peas in Green & Yellow Split Peas Only	1.5	3.0	5.0
Foreign Material	0.1	0.2	0.5
Minimum Requirements for Color	Good	Fair	Poor
U.S. Sample grade: U.S. Sample grade shall be split peas which:			
(a) Do not meet the requirements for the grades U.S. Nos. 1, 2, or 3; or			
(b) Contain more than 15.0 percent moisture; live weevils, other live insects, insect webbing or filth; metal fragments; broken glass; or a commercially objectionable odor; or			
(c) Are heating or are of distinctly low quality.			
^{1/} Damaged split peas do not include weevil-damaged or heat-damaged split peas.			

508 Grade designation for split peas.

The grade designation for split peas shall include in the following order, the letters AU.S.®, the number of the grade or the words ASample grade®, the name of the class; and the name of each applicable special grade.

Special Grade, Special Grade Requirements, and Special Grade Designations

509 Special grade and requirements.

The special grade ASplit pea chips® shall be applied in accordance with the following requirements: The split peas shall readily pass through a 12/64 round-hole sieve. Additional size requirements for the respective numerical grades shall be as follows:

U.S. No. 1-Not more than 3.0 percent shall readily pass through a 6/64 round-hole sieve;
U.S. No. 2-Not more than 6.0 percent shall readily pass through a 6/64 round-hole sieve;
U.S. No. 3-Not more than 10.0 percent shall readily pass through a 6/64 round-hole sieve.

510 Special grade designation.

Split pea chips shall be graded and designated according to the grade requirements of the standards otherwise applicable to split peas, except for size, and there shall be added to and made a part of the grade designation, the word AChips.®

UNITED STATES STANDARDS FOR LENTILS¹

Terms Defined

601 Definitions

For the purposes of these standards the following terms shall have the meaning stated below.

- (a) *Class*. There is one class: Lentils.
- (b) *Damaged lentils*. Whole and pieces of lentils which are distinctly damaged by frost, weather, disease, heat (other than to a material extent) or other causes, except weevil or material heat damage or are distinctly soiled or stained by nightshade, dirt, or toxic material.
- (c) *Defective lentils (total)*. The categories of defective lentils shall be weevil-damaged lentils, heat-damaged lentils, damaged lentils, and split lentils.
- (d) *Dockage*. Small underdeveloped lentils, pieces of lentils, and all matter other than lentils which can be readily removed by use of sieves and cleaning devices as set forth in the Pea and Lentil Handbook (see 606).
- (e) *Dockage-free lentils*. Lentils from which the dockage has been removed.
- (f) *Fair color lentils*. Lentils that are not of good color.
- (g) *Foreign material in dockage-free lentils*. All matter other than lentils, and including detached seedcoats.
- (h) *Foreign material in thresher-run lentils*. All matter other than lentils, and including detached seedcoats, which cannot be readily removed in the proper determination of dockage.
- (i) *Good color lentils*. Lentils that in mass are practically free from discoloration and have the natural color and appearance characteristic of the predominating lentils.
- (j) *Heat-damaged lentils*. Whole and pieces of lentils which have been materially discolored as a result of heating.

¹ Compliance with the provisions of these standards does not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act, or other Federal laws.

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(k) *Lentils*. Threshed seeds of the lentil plant (*Lens culinaris Moench*), which after removal of the dockage, contain 50.0 percent or more of whole lentils and not more than 10.0 percent foreign material.

(l) *Skinned lentils*. Lentils from which three-fourths or more of the seedcoat has been removed.

(m) *Split lentils*. Pieces of lentils which are less than three-fourths of a lentil, and lentils in which the cotyledons are loosely held together.

(n) *Stones*. Concreted earthy or mineral matter, and other substances of similar hardness that do not readily disintegrate in water.

(o) *Thresher-run lentils*. Lentils from which the dockage has not been removed.

(p) *Weevil-damaged lentils*. Whole and pieces of lentils which are distinctly damaged by weevils or other insects.

(q) *Whole lentils*. Lentils with one-fourth or less of the cotyledons removed and with the remainder of the cotyledons firmly held together.

(r) *9/64 round-hole sieve*. A metal sieve 0.0319 inch thick, perforated with round holes 0.1406 (9/64) inch in diameter which are 0.1875 (3/16) inch from center to center. (The perforations of each row shall be staggered in relation to the adjacent rows.)

(s) *12/64 round-hole sieve*. A metal sieve 0.0319 inch thick, perforated with round holes 0.1875 (12/64) inch in diameter, which are 0.250 (**3**) inch from center to center. (The perforations of each row shall be staggered in relation to the adjacent rows.)

(t) *15/64 round-hole sieve*. A metal sieve 0.0319 inch thick, perforated with round holes 0.2343 (15/64) inch in diameter, which are 0.3125 (5/16) inch from center to center. (The perforations of each row shall be staggered in relation to the adjacent rows.)

(u) *Inconspicuous Admixture*. Any seed which is difficult to distinguish from a lentil, including, but not limited to, *vicia sativa*.

Principles Governing Application of Standards

602 Basis of determinations

(a) All factor determinations shall be made upon the basis of the lentils after the removal of dockage, with the following exceptions:

(1) Dockage shall be determined upon the basis of the thresher-run lentils as sampled.

(2) Color shall be determined after removal of dockage, defective peas, and foreign material.

(b) Defects in lentils shall be scored in accordance with the order shown in 601(c); and once an individual lentil is scored in a defective category it shall not be scored for any other defect but it shall remain as a part of the sample for purposes of determining the percentages of other defects in the sample.

603 Moisture.

Moisture content shall be determined by the use of equipment and procedures set forth in the Equipment Handbook, or by any method which gives equivalent results (see 606).

604 Percentages.

All percentages shall be determined on the basis of weight and shall be rounded off in accordance with instructions shown in the Pea and Lentil Handbook (see 606).

Percentages shall be stated in whole and tenth percent to the nearest tenth percent.

605 Interpretive line samples.

Interpretive line samples showing the official scoring line for factors that are determined by visual observation shall be maintained by the Federal Grain Inspection Service, U.S. Department of Agriculture, and shall be available for reference in all inspection offices that inspect and grade lentils.

606 References.

The following publications are referenced in these standards and copies will be made available upon request to the Federal Grain Inspection Service, U.S. Department of Agriculture.

(a) Equipment Handbook, U.S. Department of Agriculture, Federal Grain Inspection Service.

(b) Pea and Lentil Handbook, U.S. Department of Agriculture, Federal Grain Inspection Service.

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Grades, Grade Requirements, and Grade Designation

607 Grades and grade requirements for dockage-free lentils

Grading Factors	Maximum percent limits of: Grades U.S. Nos.		
	1	2	3
Defective Lentils			
Total	2.0	3.5	5.0
Weevil-Damaged Lentils	0.3	0.8	0.8
Heat-Damaged Lentils	0.2	0.5	1.0
Foreign Material			
Total	0.2	0.5	0.5
Stones	0.1	0.2	0.2
Skinned Lentils	4.0	7.0	10.0
Inconspicuous Admixture	0.5	0.8	1.0
Minimum Requirements for Color	Good	Fair	Fair
U.S. Sample grade: U.S. Sample grade shall be lentils which - (a) Do not meet the requirements for the grades U.S. Nos. 1, 2, or 3; or (b) Contain more than 14.0 percent moisture, live weevils, or other live insects, metal fragments, broken glass, or a commercially objectionable odor; or (c) Are materially weathered, heating, or distinctly low quality.			

608 Grade designation for dockage-free lentils

The grade designation for dockage-free lentils shall include, in the order named, the letters AU.S.®, the number of the grade or the words ASample grade® when applicable; the name of each applicable special grade; and the name of the class.

Special Grades, Special Grade Requirements, and Special Grade Designations**609 Special grades and requirements.**

The following special grades shall be applicable:

- (a) *Large lentils.* Lentils of the class Lentils of which not more than 3.0 percent will readily pass through a 15/64 round-hole sieve.
- (b) *Small lentils.* Lentils of the class Lentils of which 95 percent or more will readily pass through a 15/64 round-hole sieve, not less than 80 percent will readily pass through a 12/64 round-hole sieve, and not more than 3 percent will readily pass through a 9/64 round-hole sieve.

610 Special grade designation.

Large lentils and Small lentils shall be graded and designated according to the grade requirements of the standards otherwise applicable to lentils, and there shall be added to and made a part of the grade designation preceding the name of the class, the applicable term ALarge® or ASmall.®

611 Thresher-run lentils.

Thresher-run lentils shall be inspected without reference to grade in accordance with instructions shown in the Pea and Lentil Handbook (see 606).

- (a) *Factor determinations:* Thresher-run lentils may be inspected for the following factors: Class, dockage, weevil-damaged lentils, heat-damaged lentils, damaged lentils, split lentils, foreign material, and color description.
- (b) The percentage of defective lentils and foreign material shall be combined and shown on the certificate as Atotal defects and foreign material.®

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